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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Hidenari SAKAGUCHI                          Group Art Unit : Not Yet Assigned  
Appl. No. : 10/564,551                                  Examiner : Not Yet Assigned  
(U.S. National Stage of PCT/JP2004/010272)  
I.A. Filed : July 13, 2004                                  Confirmation No.: 9501  
For : MEDICAL LIGHT EMITTING DEVICE

## COMPLETION OF RECORD

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop AMENDMENT  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir :

In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and §§1.97-1.98, Applicant hereby bring to the attention of the Examiner an English language translation of an International Preliminary Report on Patentability with respect to International Patent Application No. PCT/JP2004/010272.

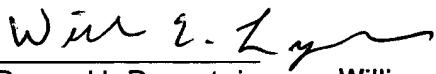
Applicant notes that a copy of an Japanese language version of the International Preliminary Report on Patentability has been filed concurrently with the present application, and the documents cited in the International Preliminary Report on Patentability have been cited in the Information Disclosure Statement filed on May 26, 2006. To complete the record, a copy of the above-noted English language translation of an International Preliminary Report on Patentability is attached hereto.

Applicant respectfully requests that the Examiner consider the above material.

Applicant notes that an Office Action on the merits has not issued in the present application, and thus no fee is believed necessary to ensure consideration of the submitted material.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully Submitted,  
Hidenari SAKAGUCHI

  
Bruce H. Bernstein      William E. Lyddane  
Reg. No. 29,027      Reg. No. 41,568

June 29, 2006  
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# PCT

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II)  
OF THE PATENT COOPERATION TREATY  
(PCT Rules 44bis.3(c) and 72.2)

|  |   |
|--|---|
| Date of mailing (day/month/year)<br>11 May 2006 (11.05.2006) | To:<br><br>SIKs & Co.<br>8th Floor<br>Kyobashi-Nisshoku Bldg.<br>8-7, Kyobashi 1-chome<br>Chuo-ku, Tokyo 1040031<br>JAPON |
| Applicant's or agent's file reference<br>A41305A             | <b>IMPORTANT NOTIFICATION</b>   |
| International application No.<br>PCT/JP2004/010272           | International filing date (day/month/year)<br>13 July 2004 (13.07.2004)   |
| Applicant<br>SHOWA YAKUHIN KAKO CO., LTD. et al              |   |

**1. Transmittal of the translation to the applicant.**

- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).
- The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

**2. Transmittal of the copy of the translation to the designated or elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

EP, KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

**It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.**

|   |   |
|---|---|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland | Authorized officer<br><br>Masashi Honda |
| Facsimile No.+41 22 740 14 35   | Facsimile No.+41 22 338 70 10           |

Translation

## PATENT COOPERATION TREATY

# PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

|  |  |  |
|--|--|--|
| Applicant's or agent's file reference<br><b>A41305A</b>  | FOR FURTHER ACTION   | See Form PCT/IPEA/416  |
| International application No.<br><b>PCT/JP2004/010272</b>  | International filing date ( <i>day/month/year</i> )<br><b>13.07.2004</b> | Priority date ( <i>day/month/year</i> )<br><b>14.07.2003</b> |
| International Patent Classification (IPC) or national classification and IPC<br><b>A 6 1 C 1 7 / 0 0 , 1 9 / 0 0 , A 6 1 B 1 / 2 4</b> |  |  |

|  |
|--|
| Applicant<br><b>SHOWA YAKUHIN KAKO CO., LTD.</b> |
|--|

|  |   |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
|--|---|-------------------------------|--------------------------|---------------------|--------------------------|--|--------------------------|---------------------------------------|-------------------------------------|---|--------------------------|------------------------------------|--------------------------|--|--------------------------|--|
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI Certain documents cited</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VII Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII Certain observations on the international application</td> </tr> </table> | <input checked="" type="checkbox"/>   | Box No. I Basis of the report | <input type="checkbox"/> | Box No. II Priority | <input type="checkbox"/> | Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability | <input type="checkbox"/> | Box No. IV Lack of unity of invention | <input checked="" type="checkbox"/> | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement | <input type="checkbox"/> | Box No. VI Certain documents cited | <input type="checkbox"/> | Box No. VII Certain defects in the international application | <input type="checkbox"/> | Box No. VIII Certain observations on the international application |
| <input checked="" type="checkbox"/>  | Box No. I Basis of the report   |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. II Priority   |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. IV Lack of unity of invention   |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input checked="" type="checkbox"/>  | Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. VI Certain documents cited  |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. VII Certain defects in the international application  |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |
| <input type="checkbox"/>   | Box No. VIII Certain observations on the international application  |                               |                          |                     |                          |  |                          |                                       |                                     |   |                          |                                    |                          |  |                          |  |

|   |                                   |
|---|-----------------------------------|
| Date of submission of the demand        | Date of completion of this report |
| Name and mailing address of the IPEA/JP | Authorized officer                |
| Facsimile No.                           | Telephone No.                     |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/010272

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- international search (Rule 12.3 and 23.1(b))  
 publication of the international application (Rule 12.4)  
 international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- the international application as originally filed/furnished  
 the description:  
 pages \_\_\_\_\_ as originally filed/furnished  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the claims:  
 nos. \_\_\_\_\_ as originally filed/furnished  
 nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the drawings:  
 sheets \_\_\_\_\_ as originally filed/furnished  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
 sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
- the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- the description, pages \_\_\_\_\_  
 the claims, nos. \_\_\_\_\_  
 the drawings, sheets/figs \_\_\_\_\_  
 the sequence listing (*specify*): \_\_\_\_\_  
 any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/010272

|   |   |        |     |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
|---|---|--------|-----|-------------|--------|-----|-----|--|--------|---|----|---------------------|--------|-----|-----|--|--------|--------|----|-------------------------------|--------|-----|-----|--|--------|--|----|
| Box No. V   | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |        |     |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
| <p><b>1. Statement</b></p> <table> <tr> <td>Novelty (N)</td> <td>Claims</td> <td>2-8</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>1</td> <td>NO</td> </tr> <tr> <td>Inventive step (IS)</td> <td>Claims</td> <td>2-5</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td>1, 6-8</td> <td>NO</td> </tr> <tr> <td>Industrial applicability (IA)</td> <td>Claims</td> <td>1-8</td> <td>YES</td> </tr> <tr> <td></td> <td>Claims</td> <td></td> <td>NO</td> </tr> </table> <p><b>2. Citations and explanations (Rule 70.7)</b></p> <p>Document 1: JP 10-33576 A (Kyoto Tool Co., Ltd.), 10 February 1998</p> <p>Document 2: JP 9-82101 A (Seikosha Corp.), 28 March 1997</p> <p>Document 3: JP 2003-165924 A (Nippon Sheet Glass Co., Ltd.), 10 June 2003</p> <p>Document 4: JP 2004-205500 A (Toyoda Gosei Co., Ltd.), 23 July 2002</p> <p>The invention set forth in claim 1 is not novel and does not involve an inventive step, because it is disclosed in document 1 cited in the international search report. The invention disclosed in document 1 is a probe for measuring and probing the periodontal pocket, comprising a fluorescent resin, which is also a luminescent device for medical use.</p> <p>The invention set forth in claim 6 does not involve an inventive step in the light of document 1 and document 2, cited in the international search report. A person skilled in the art could easily apply the feature of "using physical luminescence and chemical luminescence by employing a photoluminescent phosphor as a luminescent element", as taught by document 2 (claim 4 and paragraph</p> |   |        |     | Novelty (N) | Claims | 2-8 | YES |  | Claims | 1 | NO | Inventive step (IS) | Claims | 2-5 | YES |  | Claims | 1, 6-8 | NO | Industrial applicability (IA) | Claims | 1-8 | YES |  | Claims |  | NO |
| Novelty (N)   | Claims  | 2-8    | YES |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
|   | Claims  | 1      | NO  |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
| Inventive step (IS)   | Claims  | 2-5    | YES |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
|   | Claims  | 1, 6-8 | NO  |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
| Industrial applicability (IA)   | Claims  | 1-8    | YES |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |
|   | Claims  |        | NO  |             |        |     |     |  |        |   |    |                     |        |     |     |  |        |        |    |                               |        |     |     |  |        |  |    |

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/010272

| Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
|-----------|---|
|           | [0002]) in a device disclosed in document 1.  |

The invention set forth in claim 7 does not involve an inventive step in the light of document 1 and document 2. A person skilled in the art could easily apply the feature of "using luminol or an oxalic acid ester in a chemiluminescent device", as taught by document 2 (claim 4 and paragraph [0002]) in a device disclosed in document 1.

The invention set forth in claim 8 does not involve an inventive step in the light of document 1 and document 2, and document 3 and document 4, cited in the international search report. A person skilled in the art could easily apply the feature of "using strontium aluminate as a photoluminescent material" as taught in document 3 (paragraph [0023]), and "using europium as a fluorescent material" as taught in document 4 (paragraph [0024]) in a device disclosed in document 1.

In the inventions set forth in claims 2-5, the feature of a "mouthpiece having a luminescent body or phosphorescent body" is not disclosed in any of the documents cited in the international search report, and is not obvious to a person skilled in the art.

Therefore, the inventions set forth in claims 2-5 are not disclosed in any of the documents cited in the international search report and are not obvious to a person skilled in the art.